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HONEYWELL INTERNATIONAL INC.  
101 COLUMBIA ROAD  
P O BOX 2245  
MORRISTOWN, NJ 07962-2245

EXAMINER

LEE, WILSON

ART UNIT PAPER NUMBER

2821

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/767,897

Applicant(s)

Ha et al.

Examiner

Wilson Lee

Art Unit

2821



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Sep 30, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-70, 72-75, 84, and 86-91 is/are pending in the application.
- 4a) Of the above, claim(s) 1-9 and 20-61 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-19, 62-70, 72-75, 84, and 86-91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 1-9 and 20-61 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

### **Response to Arguments on Restriction**

Applicant elects claims 10-19, 62-70, 72-75, 84, 86-91 of group I with traverse.

Applicant is respectfully reminded that conducting a search on application merely plays a small part of examining the invention. Burden may also arise from prosecuting multiple inventions in a single application. Such a type prosecution merely leads to complication in patentability determination that may ultimately sacrifices the quality of patentability determination. Besides, since it has been concluded that the pending application includes at least two separate distinctive and independent inventions, therefore, a restriction imposed is clearly proper.

The requirement is still deemed proper and is therefore made **FINAL**.

### **Response to Arguments on Rejections**

Regarding the limitation "charging parameters are established by microprocessor", it is not found in the claims. For example, Claim 10 merely discloses that the control circuitry incrementally alters a capacitor charging parameter.

Regarding the limitation of "closed loop", it can be only found in claim 68. Other independent claims do not include this limitation.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies the limitations mentioned above are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### **Claim Rejections – 35 U.S.C. 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 68-70, 72-75, 84, 86-91 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 68, 84, 87, 88, 89, 90, 91, applicant discloses two separate independent ranges in one claim (e.g. 8-18 volts, 8-17 volts, 16-33 volts). They render uncertainty to the invention whether 8-18 volts, 8-17 volts or 16-33 volts is required in the invention.

Claims 69, 70, 72-75, 86 are indefinite by virtue of their dependency on claims 68 and 84.

### **Claim Rejections – 35 U.S.C. 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-19, 62-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosich (6,311,021) cited in IDS by applicant.

Regarding Claim 10, Kosich discloses a strobe comprising:

- a housing (See Col. 3, line 18);
- a gas filled tube (DS1);

Art Unit: 2821

- a capacitor (C9) coupled to the tube;
- control circuitry (100) carried in the housing, coupled to the capacitor, the specifying element and the input terminals; wherein the control circuitry includes a capacitor voltage feedback circuit (See Col. 6, lines 15-32), and in response to a feedback signal there from, incrementally alters a capacitor charging parameter for a subsequent charging cycle (e.g. a portion of the voltage across C9 fed back to micro-controller U1) so as to produce the specified candela when the tube is energized (See Col. 5, lines 51-59 and Col. 6, lines 33-53).

Further, Kosich discloses a candela specifying element (SW1) (See Col. 5, lines 51 to Col. 6, line 14) and input terminals for receipt of voltages in a range of 20-31 volts (See Col. 2, lines 43-44). Although Kosich does not disclose a range of 10-30 volts that is the same as claimed, however, his discovery of the range of 20-31 volts encompassing a somewhat narrower claimed range is sufficient to establish a prima facie case of obviousness. In re Peterson, 315 F. 3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003).

Regarding Claim 11, Kosich discloses that the control circuitry stores parameters indicative of each specifiable candela (a plurality of selectable candela settings or intensity levels have been stored in the unit. See abstract).

Regarding Claim 12, Kosich discloses a circuitry (120) for energizing the tube in accordance with the specified candela.

Art Unit: 2821

Regarding Claim 13, Kosich discloses a circuitry (120) responsive to the voltage applied to the terminals (1, 2) for energizing the tube in accordance with the candela specifying element (See Col.4, lines 36-45).

Regarding Claim 14, Kosich discloses that the control circuitry (100) includes a programmed processor (110 or U1) and storage for output parameters associated with respective specifiable candela (candela settings).

Regarding Claim 15, Kosich discloses that the processor (U1) executes pre-stored instructions for altering a charging rate of the capacitor (e.g. increments of energy) in response to a selected output parameter (e.g. 15, 30, 75, 110 candela) (See Col. 5, line 51 to Col. 6, line 14).

Regarding Claim 16, Kosich discloses that the control circuitry illuminates the tube, at least at a first predetermined rate (e.g. a threshold value), and wherein the instructions alter the charging rate (e.g. prevent overcharging) between illuminations (See Col. 6, lines 15-32).

Regarding Claim 17, Kosich discloses that the instructions repetitively increase the charging rate (e.g. the rate at which increments of energy transferred to C9) between illuminations in response to a need to increase capacitor voltage (See Col. 5, line 51 to Col. 6, line 15).

Regarding Claim 18, Kosich discloses a constant frequency, variable duty cycle capacitor charging circuitry (PWM) (See Col. 6, lines 8-14 and Col. 9, lines 14-31).

Regarding Claim 19, Kosich discloses that the instructions alter the duty cycle in response to applied input voltage (See Col. 6, lines 8-14 and Col. 9, lines 32-42).

Regarding Claim 62, Kosich discloses a strobe comprising: a housing (See Col. 3, line 18); a trigger-able source (DS1) of illumination carried by the housing; control circuitry (100) carried by the housing and coupled to the source of illumination; an illumination output specifying element (SW1) (See Col. 5, lines 51 to Col. 6, line 14), coupled to the control circuitry, for specifying a desired light output; a power supply (120), carried by the housing, and coupled to the control circuit, wherein the supply includes input terminals for receipt of electrical energy of varying levels (15, 30, 75, 110 candela); and wherein the control circuitry (100) initiates each charging cycle by step-wise increasing a capacitor charging duty cycle parameter on a predetermined basis prior to altering that parameter in response to a feedback signal from the capacitor (See Col. 6, lines 15-53).

Further, Kosich discloses that the control circuitry is responsive to received levels of electrical energy varying over 20-31 volts (See Col. 2, lines 43-44) to provide the specified output of illumination. Although he does not disclose the same range as claimed (e.g. 8-30 volts), however, his discovery of the range of 20-31 volts encompassing a somewhat narrower claimed range is sufficient to establish a prima facie case of obviousness. In re Peterson, 315 F. 3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003).

Regarding Claim 63, Kosich discloses that circuitry (U1) which senses synchronizing pulses received at the input terminals (See Col. 9, lines 1-56).

Regarding Claim 64, Kosich discloses an audible output device (horn) and circuitry (150) for driving the output device in response to sensed synchronization pulses (See Figure 3).

Regarding Claim 65, Kosich discloses a storage capacitor (C9) for accumulating electrical energy (the rate at which the increments of energy are transferred from L1 to C9) for triggering the source and wherein the control circuitry includes executable instructions for adjusting a rate of charging the capacitor in response to a received level of electrical energy (See Col. 5, line 51 to Col. 6, line 15 and Col. 6, lines 33-53).

Regarding Claim 66, Kosich discloses instructions for increasing a charging duty cycle on a per cycle basis (frequency ramped up) (See Col. 10, lines 7-14).

Regarding Claim 67, Kosich discloses that circuitry (U1) which senses synchronizing pulses received at the input terminals (See Col. 9, lines 1-56).

Claim 91, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kosich (6,311,021) cited in IDS by applicant.

Regarding Claim 91, Kosich discloses a strobe comprising: a housing (See Col. 3, line 18); a light source (DS1); a capacitor (C9) coupled to the source; a candela specifying element (SW1) (See Col. 5, lines 51 to Col. 6, line 14); control circuitry (100), carried in the housing, coupled at least to the specifying element and a feedback circuit, the feedback circuit (See Col. 6, lines 15-32) is also coupled to the capacitor wherein the control circuit repetitively charges the capacitor during a plurality of cycles and during each such cycle that circuitry alters a capacitor charging parameter (See Col. 8,

Art Unit: 2821

lines 14-18) in response to at least one feedback signal from the feedback circuit so as to produce the specified candela output at the light source (See Col. 6, lines 15-53).

Further, Kosich discloses that the input terminals for receipt of voltages in the range of 20-31 volts (See Col. 2, lines 43-44). Although he does not disclose the same range as claimed (e.g. 16-33 volts), however, his discovery of the range of 20-31 volts encompassing a somewhat narrower claimed range is sufficient to establish a prima facie case of obviousness. In re Peterson, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003).

#### **Allowable subject matter**

Claims 68-70, 72-75 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

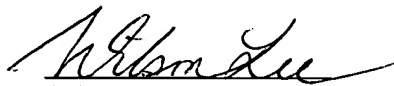
The following is a statement of reasons for the indication of allowable subject matter:

The prior art neither discloses nor suggests that the control circuitry and the specifying element and instructions for charging the capacitor in a closed control loop in accordance with the specifying element wherein the processor executes pre-stored instructions for altering a charging rate of the capacitor in response to a selected candela output parameter as required by claim 68.

Claims 84, 87-90 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956. Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.



Primary Examiner  
Art Unit 2821  
U.S. Patent & Trademark Office

WL  
1/12/04